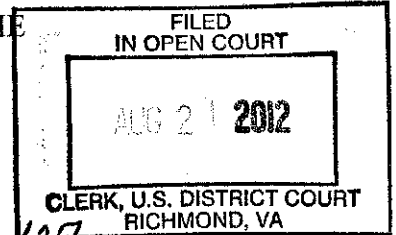


IN THE UNITED STATES DISTRICT COURT FOR THE  
EASTERN DISTRICT OF VIRGINIA

Richmond Division



UNITED STATES OF AMERICA	)	Case No. 3:12-CR-	137
	)		
v.	)	Count 1: 18 U.S.C. § 1832(a)(5)	
	)	(Conspiracy to Convert Trade Secrets)	
KOLON INDUSTRIES, INC.,	)		
(Counts 1-6)	)	Counts 2-5: 18 U.S.C. §§ 1832(a)(2) & 2	
JONG-HYUN CHOI,	)	(Theft of Trade Secrets)	
(Counts 1, 6)	)		
IN-SIK HAN,	)	Count 6: 18 U.S.C. §§ 1512(c) & 2	
(Counts 1, 6)	)	(Obstruction of Justice)	
JU-WAN KIM,	)		
(Counts 1, 6)	)	Forfeiture Notice	
KYEONG-HWAN RHO,	)		
(Counts 1, 6)	)		
YOUNG-SOO SEO,	)		
(Counts 1, 6)	)		
	)		
Defendants.	)		

**INDICTMENT**

August 2012 Term – at Richmond, Virginia

THE GRAND JURY CHARGES THAT:

Unless otherwise noted, at all times material to this Indictment:

**Introductory Allegations**

**I. The Victims**

1. E. I. du Pont de Nemours and Company (“DuPont”) was one of the largest chemical companies in the United States. One of DuPont’s best known products was Kevlar® (“Kevlar”), a high strength para-aramid fiber that was used in a variety of applications including body armor, fiberoptic cables, and automotive and industrial products. DuPont developed and

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manufactured Kevlar at a facility in Richmond, Virginia, within the Eastern District of Virginia, called the Spruance Plant. DuPont also manufactured Kevlar at a facility in Maydown, Ireland.

2. Dupont-Toray Company Ltd. ("DuPont-Toray") was a joint venture between DuPont and a Japanese company. DuPont-Toray manufactured Kevlar at a facility in Tokai, Japan.

3. DuPont and DuPont-Toray maintained certain technical and business information regarding Kevlar as trade secrets.

4. DuPont and DuPont-Toray produced Kevlar for, and placed it in, interstate and foreign commerce.

5. Teijin Limited was one of the largest chemical companies in Japan. In or about 2000, Teijin Limited acquired the assets of a company headquartered in the Netherlands that became known as Teijin Twaron B.V. ("Teijin Twaron"). At the same time, Teijin Limited acquired the assets of a company headquartered in Conyers, Georgia, that became known as Teijin Twaron USA Inc. ("Teijin Twaron USA"). In or about September 2007, Teijin Twaron and Teijin Twaron USA changed their names to Teijin Aramid B.V. and Teijin Aramid USA Inc., respectively. Teijin Limited and its subsidiaries are referred to collectively in this Indictment as "Teijin."

6. Teijin manufactured and sold Twaron® ("Twaron"), a well known, high strength para-aramid fiber.

7. Teijin maintained certain information regarding Twaron, including the design details of production equipment and facilities, as trade secrets.

8. Teijin produced Twaron for, and placed it in, interstate and foreign commerce.

9. In general, Kevlar and Twaron were competing products and were used for similar purposes. For decades prior to the conduct described in this Indictment, Kevlar and Twaron were the only widely commercially available para-aramid fiber products.

## **II. The Defendants**

10. Defendant KOLON INDUSTRIES, INC. ("KOLON") was headquartered in Seoul, South Korea. KOLON endeavored to develop Heracron® ("Heracron"), a para-aramid fiber designed to compete with Kevlar and Twaron.

11. Defendant JONG-HYUN CHOI ("CHOI") worked for KOLON for more than 25 years. In 2006 and 2007, he served as a Vice President and Managing Director with responsibility for overseeing the Heracron Business Team. In this capacity, he was the senior executive in the hierarchy of the Heracron business.

12. Defendant IN-SIK HAN ("HAN") worked for KOLON for more than 25 years. Starting in or about January 2005, he served as a Deputy Vice President and Managing Director of the Heracron Research Center. In this capacity, he oversaw research and development related to Heracron. Prior to 2005, HAN worked on various research projects related to Heracron.

13. Defendant JU-WAN KIM ("KIM") was a manager on the Heracron Business Team from in or about September 2007 through in or about February 2009. In this capacity, he reported to YOUNG-SOO SEO.

14. Defendant KYEONG-HWAN RHO ("RHO") worked for KOLON for more than 25 years. RHO worked on Heracron in various capacities since in or about 2006. Beginning in or about January 2008, RHO served as the head of the Heracron Technical Team.

15. Defendant YOUNG-SOO SEO ("SEO") worked for KOLON for more than 20 years. Starting in or about November 2006, he served as a General Manager in the Heracron Business Team. In this capacity, he reported to CHOI.

### **III. Other Relevant Actors**

16. E.S. was an unindicted co-conspirator employed by DuPont from in or about 1969 until in or about 2000. Among other things, E.S. was responsible for technical research and development relating to Kevlar.

17. M.M. was an unindicted co-conspirator employed by DuPont from in or about 1982 until in or about 2006. Among other things, M.M. was responsible for sales and marketing of Kevlar.

18. A.S. was an unindicted co-conspirator employed by DuPont-Toray from in or about 1992 to 2004. Among other things, A.S. was responsible for technical research and development relating to Kevlar.

19. G.H. was employed by DuPont from in or about 1962 until in or about 1995. Among other things, G.H. was responsible for technical research and development relating to Kevlar.

20. R.R. was employed by DuPont from in or about 1969 until in or about 2001. Among other things, R.R. was responsible for technical research and development relating to Kevlar.

21. J.F. was employed by Teijin Twaron USA from in or about 1998 to 2007. J.F. was responsible for sales and marketing of Twaron.

#### IV. DuPont's and Teijin's Treatment of Confidential Proprietary Information

22. While DuPont disclosed basic concepts related to Kevlar manufacture in patents and trade journals, it treated the vast majority of technical information related to the commercial manufacture of Kevlar as confidential and proprietary. This confidential proprietary information included the design details and settings of various manufacturing equipment and processes, as well as certain research results and mathematical relationships related to Kevlar manufacture.

23. The following technical information and documents, among others, were treated as confidential and proprietary by DuPont:

- a. **DuPont's Deaerator Design.** A deaerator was a device that was used for the removal of oxygen and other dissolved gases during the process of manufacturing Kevlar.
- b. **DuPont's Spinneret Design.** A spinneret was a device through which polymer was extruded to form fibers during the process of manufacturing Kevlar.
- c. **Kevlar Basic Data Documents.** These documents provided a detailed description of the performance characteristics for the equipment required to make Kevlar on a commercial scale.
- d. **Kevlar Polymerization Documents.** These documents, authored by several DuPont engineers, compiled years worth of research by DuPont into the polymerization process for manufacturing Kevlar.
- e. **Instructional Materials on New Fiber Technology ("NFT").** NFT was an innovation that substantially advanced the manufacture of Kevlar by allowing DuPont to make lighter and stronger product on a commercial scale.
- f. **DuPont's Dewaterer Design.** A dewaterer was a device that was used to remove residual liquid during the process of manufacturing Kevlar.

24. DuPont also maintained certain business information regarding Kevlar as confidential and proprietary. This information included detailed breakdowns of DuPont's capabilities and costs for the full line of its Kevlar products, the costs and profit margins associated with the Kevlar manufacturing process, the identity of DuPont's customers for Kevlar, and DuPont's business plans for the para-aramid market.

25. Among other measures to protect its confidential proprietary information, DuPont executed agreements with its employees, including E.S., M.M., G.H., and R.R., which required that DuPont's employees not disclose secret or confidential information, either during or after their period of employment with DuPont, unless they obtained prior written consent from DuPont. In the agreements, each employee pledged that upon termination he would promptly return all drawings, blueprints, manuals, letters, notes, notebooks, reports, and all other materials of a secret or confidential nature to DuPont.

26. Teijin maintained certain types of information related to the manufacturing process for Twaron as proprietary and confidential. Such information included the equipment and facilities used by Teijin in the manufacturing and production process for Twaron.

27. Among other measures to protect its confidential proprietary information, Teijin executed agreements with its employees, including J.F., that required its employees not disclose trade secret or confidential information related to Twaron even after their employment with Teijin had ended.

28. The allegations in paragraphs 1 through 27 are re-alleged in each count of this Indictment as if set forth fully therein.

**COUNT 1**  
**(Conspiracy to Convert Trade Secrets - All Defendants)**

**I. The Conspiracy and Its Objects**

29. Beginning on a date unknown to the Grand Jury but at least by on or about July 11, 2002, and continuing until on or about February 3, 2009, in the Eastern District of Virginia and elsewhere, defendants

**KOLON INDUSTRIES, INC.,  
JONG-HYUN CHOI,  
IN-SIK HAN,  
JU-WAN KIM,  
KYEONG-HWAN RHO, and  
YOUNG-SOO SEO**

did knowingly and willfully combine, conspire, confederate, and agree with each other, and others known and unknown to the Grand Jury, with intent to convert trade secrets, that were related to and included in a product produced for and placed in interstate and foreign commerce, to the economic benefit of someone other than the owners of the trade secrets, and intending and knowing that the offense would injure the owners of that trade secrets, to:

- a. steal and without authorization appropriate, take, carry away, and conceal, and by fraud, artifice, and deception obtain DuPont's Kevlar trade secrets and Teijin's Twaron trade secrets, in violation of Title 18, United States Code, Section 1832(a)(1);
- b. without authorization copy, duplicate, sketch, draw, photograph, download, upload, alter, destroy, photocopy, replicate, transmit, deliver, send, mail, communicate, and convey DuPont's Kevlar trade secrets and Teijin's Twaron trade secrets, in violation of Title 18, United States Code, Section 1832(a)(2); and

c. receive, buy, and possess DuPont's Kevlar trade secrets and Teijin's Twaron trade secrets, knowing the same to have been stolen and appropriated, obtained, and converted without authorization, in violation of Title 18, United States Code, Section 1832(a)(3); and committed at least one overt act in order to effect the object and purpose of the conspiracy.

30. It was the object and purpose of the conspiracy for the conspirators to obtain DuPont's Kevlar trade secrets and Teijin's Twaron trade secrets in order to improve the Heracron product.

## **II. Manner and Means of the Conspiracy**

The manner and means by which the defendants and their co-conspirators sought to accomplish the objects of the conspiracy included, among others, the following:

31. Defendant KOLON sought to obtain trade secrets related to Kevlar and Twaron by hiring and attempting to hire former and current employees of DuPont, DuPont-Toray, and Teijin Twaron USA as "consultants," and by asking these "consultants" to reveal information that was confidential and proprietary.

32. Defendant KOLON retained E.S., M.M., A.S., G.H., and R.R. as "consultants" for the purpose of obtaining DuPont confidential information related to Kevlar.

33. On multiple occasions, members of the conspiracy, together and on behalf of defendant KOLON, did and caused others to meet with E.S., M.M., A.S., G.H., and R.R. for the purpose of obtaining DuPont confidential information related to Kevlar.

34. Members of the conspiracy, together and on behalf of defendant KOLON, did and caused others to surreptitiously record several of the "consulting" sessions with E.S. and A.S.



35. Members of the conspiracy, together and on behalf of defendant KOLON, did and caused others to copy and retain documents, notes, and presentation materials that the “consultants” brought to the meetings.

36. Members of the conspiracy, together and on behalf of defendant KOLON, did and caused others to create progress reports, meeting minutes, and other documents related to the “consultants.” Such documents often referred to DuPont as “D,” DuPont-Toray as “TD,” and Teijin as “T.”

37. Members of the conspiracy, together and on behalf of defendant KOLON, did and caused others to obtain numerous confidential DuPont documents from E.S. and M.M.

38. Defendant KOLON maintained the DuPont documents obtained from E.S. and M.M. as confidential.

39. Defendant KIM and other members of the conspiracy, together and on behalf of defendant KOLON, offered to hire J.F. as a consultant in an effort to obtain Teijin trade secrets related to Twaron.

40. Defendants KIM, RHO, and SEO met with and discussed hiring a current DuPont employee for the express purpose of obtaining DuPont trade secrets related to Kevlar.

### **III. Overt Acts**

In furtherance of the conspiracy and to achieve the objects and purposes thereof, the defendants and their co-conspirators, committed and caused to be committed the following overt acts, among others, in the Eastern District of Virginia and elsewhere:

**A. KOLON Obtained and Used Confidential Proprietary Information of DuPont Prior to Engaging the “Consultants”**

41. At a time uncertain, but prior to on or about July 11, 2002, defendant KOLON obtained confidential information revealing the number of ends on DuPont’s spinning line for Kevlar.

42. On or about July 11, 2002, defendant HAN and other KOLON employees held a meeting regarding the creation of a Heracron pilot spinning line, at which the participants discussed a plan for KOLON to “make 100% use of the obtained materials and diagrams” related to spinning and to build a spinning line that featured the same number of ends as the spinning line used by DuPont and DuPont-Toray to produce Kevlar.

43. On or about October 1, 2004, defendant KOLON created a document chronicling its progress in spinning technology. The spreadsheet indicated that a senior employee of KOLON had “obtained ... Information upon obtainment of drawing from (Japan, T-D Co.)” that specified the number of spinning lines and ends used by DuPont and DuPont-Toray to produce Kevlar.

44. On or about October 7, 2004, a senior employee of KOLON sent an email to several KOLON employees in which the sender asked the recipients to review information in an attached document regarding DuPont-Toray’s spinning of Kevlar.

45. In or about 2004 and 2005, KOLON ordered parts for and constructed a commercial spinning line that featured the same number of ends as the spinning line used by DuPont and DuPont-Toray to produce Kevlar.

**B. KOLON Directed Its Employees to Obtain DuPont and Teijin Technology Through the Use of “Consultants”**

46. Beginning in or about November 2005, defendant KOLON developed a plan to obtain confidential proprietary information of DuPont and Teijin by hiring “consultants” who had previously worked for DuPont and Teijin.

47. On or about November 10, 2005, KOLON created a plan to secure technology for Heracron. The plan indicated that “Phase 1 (2006)” involved “Secur[ing a] Consultant,” “Experienced in 1st generation,” “Dupont, Toray-dupont (priority securing of Dupont technology).” The plan also indicated that “Phase 2 (2007-2008)” involved “Secur[ing a] Consultant,” “Experience with 2nd generation and post-1990 technician.”

48. On or about February 22, 2006, defendant CHOI and other senior executives of KOLON and its parent company, Kolon Corporation, held a meeting where the following directives, among others, were set:

- a. “Make full efforts to secure technology (and technical personnel);”
- b. “Move up the target date to secure a Consultant sooner than 5/29, and must be completed through an All-in effort;”
- c. “Company D and Company T” were identified as potential sources of technology; and
- d. “Ensure security of technology, cooperate with global security company if necessary and strictly enforce technology protection.”

49. On or about April 26, 2006, defendant CHOI and senior executives of KOLON and its parent company, Kolon Corporation, held another meeting where the following directives, among others, were set:

- a. "Hiring a consultant may cause troubles later on, so there should be advance preparations to avoid those problems;"
- b. "When [Company S] obtained the semiconductor technology, it made all possible efforts and treated it like an espionage mission. We need to start preparing from now in order to prevent the fiasco;" and
- c. "Operational staff should make efforts to pursue the business with the 1st generation technology, and the research section should utilize consultants to stabilize the 1st generation, while conducting researches on Company D's next generation technology and all technologies throughout the world."

50. Senior executives of defendant KOLON and its parent company, Kolon Corporation, held additional meetings after April 26, 2006, that reinforced the directives to obtain competitor technology through the use of consultants.

**C. KOLON Obtained and Sought to Obtain Confidential Proprietary Information from the "Consultants"**

51. From in or about April 2006 through in or about July 2006, employees of defendant KOLON met with G.H. on at least two occasions, with defendants CHOI, HAN, and RHO each in attendance for at least one of the meetings with G.H.

52. From in or about April 2006 through in or about May 2008, employees of defendant KOLON met with A.S. on at least 18 occasions, with defendants CHOI, HAN, RHO, and SEO each in attendance for at least one of the meetings with A.S.

53. On or about May 25-27, 2006, employees of defendant KOLON, including defendants HAN and RHO, met with A.S. and asked A.S. to investigate, among other things, deaerator design.

54. From in or about June 2006 through in or about March 2008, employees of defendant KOLON met with E.S. on at least nine occasions, with defendants HAN and RHO in attendance for at least one of the meetings with E.S.

55. On or about July 18-20, 2006, employees of defendant KOLON, including defendants HAN and RHO, met with A.S. and learned from A.S., among other things, the dimensions of DuPont-Toray's deaerator.

56. On or about August 1-4, 2006, employees of defendant KOLON, including defendants HAN and RHO, met with E.S. and obtained from E.S. a description of the properties of DuPont's spinneret.

57. During the August 1-4, 2006 meetings, employees of defendant KOLON asked E.S. to disclose other aspects of the Kevlar manufacture process, including asking about the following:

- a. Issues with DuPont's raw materials;
- b. Characteristics of polymer used in Kevlar manufacture; and
- c. Back pressure on the Kevlar spinneret.

58. On or about August 25, 2006, defendant KOLON created a report on the E.S. consultation that indicated that the "Plans for future use" of E.S. included to obtain "[d]etailed understanding of Company D's technology and apply to our company" and to "[e]stablish polymerization reaction technology."

59. On or about September 25-29, 2006, employees of defendant KOLON, including defendant RHO, met with E.S. and obtained several categories of information regarding DuPont's manufacturing process for Kevlar such as:

- a. a description of the deaerator used by DuPont in manufacturing Kevlar, including a sketch of the deaerator used by DuPont in Kevlar manufacturing;
- b. several hundred pages of a 1974 Kevlar Basic Data Document that provided a detailed description of the performance characteristics required for equipment to make Kevlar on a commercial scale;
- c. a copy of a compilation of Kevlar Polymerization Documents, which described numerous concepts and experiment results related to the polymerization phase of the Kevlar manufacturing process;
- d. a description of the dewaterer that was used by DuPont in Kevlar manufacture and a portion of a DuPont blueprint for the dewaterer; and
- e. instructional materials that described DuPont's New Fiber Technology ("NFT").

60. At the September 25-29, 2006 meetings, E.S. told employees of defendant KOLON that the excerpt from the 1974 Basic Data Document contained "a huge amount of information" and suggested that KOLON "compare what you're doing with what was here."

61. At the September 25-29, 2006 meetings, E.S. told employees of defendant KOLON that the Kevlar Polymerization Documents could be used to improve the Heracron

product and described the documents as “pretty powerful information,” “just a wealth of information,” and “everything you could ever want to know about the reaction kinetics.”

62. During the September 25-29, 2006 meetings, employees of defendant KOLON asked E.S. to disclose other aspects of the Kevlar manufacturing process, including asking about the following:

- a. Inherence in commercial blends used by DuPont;
- b. The type of pump used by DuPont; and
- c. The number of ends on the DuPont spinning line.

63. At a time uncertain but in no event earlier than on or about September 25-29, 2006, after obtaining the 1974 Basic Data Document, defendant KOLON stamped it with its own “Confidential” stamp.

64. At a time uncertain but in no event earlier than on or about September 25-29, 2006, after obtaining the Kevlar Polymerization Documents, defendant KOLON stamped them with its own “Confidential” stamp.

65. At a time uncertain but in no event earlier than on or about September 25-29, 2006, after obtaining the NFT document, defendant KOLON stamped it with its own “Confidential” stamp.

66. On or about November 26, 2006, an employee of defendant KOLON emailed E.S. and asked him to be prepared during their next meeting to address “more recent information” regarding NFT technology.

67. On or about December 12-15, 2006, employees of defendant KOLON, including defendants HAN and RHO, met with E.S., and, according to an internal KOLON document,

KOLON “obtained a large volume of information concerning polymerization/spinning,” including the following:

- a. “[m]echanism and reaction [d]ata by each polymerization reaction factor, polymerization reaction speed, resin and energy reaction formula, phase transition related information, etc.;;”
- b. “additional information concerning [NFT] design;” and
- c. “information pertinent to [d]ewatering before drying.”

68. At the December 12-15, 2006 meetings, E.S. provided a detailed overview of the NFT document to employees of defendant KOLON, highlighted specific mathematical equations that appeared in the NFT document, and explained their significance. At these meetings, E.S. described the NFT document as “a document that was kind of internally published” and “an internal document that I was able to get.”

69. At the December 12-15, 2006 meetings, employees of defendant KOLON questioned E.S. about whether DuPont uses the NFT process to produce a specific Kevlar product known as K129. When E.S. was unable to answer these questions, the employees asked him whether he could obtain information from DuPont that would answer the question.

70. On or about March 6-9, 2007, employees of defendant KOLON, including defendants HAN and RHO, met with E.S. Minutes prepared by KOLON from those meetings included a sketch and an analysis of different types of spinneret holes.

71. From in or about March 2007 through in or about August 2008, employees of defendant KOLON met with M.M. on at least six occasions, with defendants CHOI, HAN, KIM, RHO, and SEO each in attendance for at least one of the meetings with M.M.



72. On or about March 14, 2007, an employee of defendant KOLON sent an email to M.M. in the Eastern District of Virginia, copying defendant SEO, in which the KOLON employee asked M.M. to be prepared to address a variety of topics during his initial visit to KOLON including "DuPont, Teijin Status," "Sales volume and Profit by application," "Aramid Market Status and Forecast," and "Price Strategy By Region and Application."

73. Between on or about March 14 and 19, 2007, in the Eastern District of Virginia, M.M. prepared a laptop computer and a compact disc ("CD") for his presentation to defendant KOLON. M.M. placed numerous confidential DuPont business documents on the laptop and the CD, and brought these with him to South Korea.

74. On or about March 19-20, 2007, employees of defendant KOLON, including defendants CHOI, HAN, RHO, and SEO, met with M.M. to address various topics, including those referenced in paragraph 72 of this Indictment, and referred to the materials on his laptop and CD.

75. On or about March 20, 2007, at the direction of his supervisor, an employee of defendant KOLON copied M.M.'s CD while M.M. and other KOLON employees were at lunch.

76. One of the documents that defendant KOLON obtained from M.M.'s CD was titled "Spruance Denier Economics.xls." This document was marked "DuPont Confidential Information" and contained a detailed breakdown of DuPont's capabilities and costs for the full line of its Kevlar products, including production capacity, spin speed, unit capacity, ingredient costs, variable costs, total manufacturing costs, net sales prices, and profit margins.

77. Another document that defendant KOLON obtained from M.M.'s CD was a compilation of several confidential documents that identified Kevlar customers, the actual prices paid by those customers, and the quantity of product purchased by those customers.

78. Another document that defendant KOLON obtained from M.M.'s CD was titled "North American MRG BUSINESS PLAN." This document was marked "Confidential" and contained DuPont's analysis of the mechanical rubber goods market, including market trends, assessment of competitors, ten year future premises, key uncertainties, and strategies and programs for specific Kevlar submarkets.

79. Between on or about March 21, 2007 and on or about February 3, 2009, defendant CHOI downloaded numerous files copied from M.M.'s CD to his work computer.

80. Between on or about March 21, 2007 and on or about February 3, 2009, defendant KIM downloaded numerous files copied from M.M.'s CD to his work computer.

81. Between on or about March 21, 2007 and on or about February 3, 2009, defendant RHO downloaded numerous files copied from M.M.'s CD to his work computer.

82. Between on or about March 21, 2007 and on or about February 3, 2009, defendant SEO downloaded numerous files copied from M.M.'s CD to his work computer.

83. On or about March 23, 2007, defendant SEO emailed certain files from defendant KOLON's copy of M.M.'s CD to other KOLON employees and described the files as follows:

It's the pricing of Company D's raw materials. This is for your reference in future negotiations with suppliers, and the headquarters is scheduled to request for lower pricing by contacting the Purchase Team.

84. On or about June 19-22, 2007, employees of defendant KOLON, including defendants HAN and RHO, met with E.S. and, according to an internal KOLON document,

“[a]cquired and discussed fundamental data related to the design and condition of spinnerets and Q-bath in order to achieve high tenacity,” which KOLON “[p]lan[ed] to apply to our company’s Pilot and field spinning.”

85. On or about July 27, 2007, an employee of defendant KOLON sent an email to M.M. in the Eastern District of Virginia, with a copy to defendant SEO, in which the KOLON employee asked M.M. how to make specific Kevlar products:

I want to know how to produce 3000D and HM in Kevlar like follow. . . 3000D 1. Speed . . . 2. Mono-denier . . . 3. How many lines of 3000D do they have? . . . 5. How to produce 3000D, 1500D 2ply or not? . . . 6. Key point to produce 3000D . . . HM . . . 1. How to produce HM, on-line or off-line in Kevlar? . . . 2. Do they have off-line HM facility like especially K149? . . . 3. Key point to produce HM.

86. On or about July 30, 2007, M.M. responded to the July 27, 2007 email and copied defendant SEO with answers to the questions posed in the July 27, 2007 email.

87. On or about August 1, 2007, defendant SEO forwarded M.M.’s email to several employees of defendant KOLON and instructed them as follows: “Refer to the following and delete once you understand.”

88. In or about August 2007, an employee of defendant KOLON provided M.M. with a list of questions and requests for information regarding Kevlar. The list included the following topics: “Product information and specific applications of each product,” “DuPont’s R&D trend or plan for the future,” “DuPont’s plan to extend their production capability,” “Current spinning speed for Kevlar,” “Flow, flow sheet, equipment and control point of spinning, waste sulfuric acid, polymerization, recovery and pulp,” “Production conditions,” as well as numerous specific, highly technical questions about the Kevlar manufacture process.

89. On or about September 5, 2007, M.M. sent an email from the Eastern District of Virginia to defendant KIM in response to the list of topics described in paragraph 88 of this Indictment. Attached to M.M.'s email was a compilation of confidential DuPont information related to the Kevlar business, including a portion of a Denier Economics spreadsheet.

90. On or about September 21, 2007, after defendant KOLON had received an email in which J.F. – a former employee of Teijin – applied to serve as a sales representative for KOLON, defendant KIM responded to J.F.'s inquiry as follows:

It is my pleasure to introduce me to you. . . . We are reviewing your resume. . . . You are an engineer. Do you know details about Twaron production equipments/facilities and Twaron production processes? . . . Please advise.

91. From in or about October 2007 through in or about April 2008, R.R. met with employees of defendant KOLON on at least three occasions, with defendants HAN and RHO each in attendance for at least one of the meetings with R.R.

92. On or about October 9-12, 2007, employees of defendant KOLON, including defendants HAN and RHO, met with E.S. and R.R. and discussed "Company D's initial spinning related spec[ifications]" for manufacturing Kevlar, among other topics.

93. On or about October 25, 2007, defendant KOLON created a report entitled "Heracron Technical Consultation Status," which provided the following information for each of the "consulting" sessions defendant KOLON had held to date:

- a. For A.S., a "Major Accomplishment" was that KOLON had learned "Toray-DuPont['s] production type, Fila number, spinning speed data."
- b. For E.S., one "Major Accomplishment" was that KOLON had learned "general basic information of polymerization, spinning." A second "Major

Accomplishment” was that KOLON had acquired “Key operations conditions of Company D’s polymerization process.”

- c. For M.M., one “Major Accomplishment” was that KOLON had acquired “[d]etailed Aramid market data” through an “undisclosed acquisition” that provided a “massive quantity including info on market size, market by use, price, etc.” and resulted in “boon in establishing a marketing strategy.” Another “Major Accomplishment” was that KOLON had obtained “DuPont internal information” regarding “organization, number of employees, [and] number of manufacturing lines,” and that the “[m]ost recent detailed information [was] obtained (up to 2003).”

94. On or about October 26, 2007, defendant KIM on behalf of defendant KOLON sent another email to J.F. in which KIM wrote as follows:

Let me send you some questions about Twaron technology which we want to discuss with you in Seoul. Can you prepare a presentation in which answers to these questions should be reflected, please? . . . We understand you may feel careful or may be unwilling to provide us information about Twaron technology. We want to propose you that we can pay for your consultation about Twaron technology if we can get right information which we can compare with our Heracron technology. Please take a look at each question and let us know how long it will take for you to prepare answers in detail. We also want to know how much money you will want for your consultation as well. . . . Our management and my boss are looking forward to seeing you soon.

Twelve technical questions were attached to that message to J.F., including a question about the number of ends on Twaron spinning lines.

95. On or about November 23, 2007, an employee of defendant KOLON forwarded a progress summary of the “consulting” sessions to defendant HAN. The progress summary indicated the following:

- a. E.S. had provided KOLON with “facility composition and operation condition of Company D’s de-aerator, which is one of the core spinning technologies, and applied it to the process”
- b. E.S. had provided KOLON with “Company D’s spinneret condition and the major design factors of the coagulation equipment, which are core spinning technologies, thereby resolving problems in the beginning of K-2A resulting from occurrence of broken filament and suggested the conditions for facility development and manufacturing for high-tenacity 3000De, etc.”

96. On or about January 29, 2008, after J.F. reported defendant KIM’s email to Teijin Twaron, defendant KOLON received a letter from legal representatives of Teijin Twaron demanding that KOLON cease and desist from seeking to obtain Teijin trade secrets related to Twaron.

97. On or about April 9, 2008, defendant KOLON created a report on the “consulting” sessions. With respect to M.M., the report stated the following: “Technical meeting held – Understanding of Company D’s Product Portfolio and current technology.”

**D. KOLON Employees Met with and Discussed Hiring a Current DuPont Employee for the Express Purpose of Obtaining DuPont Trade Secrets**

98. On or about July 14, 2008, defendant KIM placed a telephone call to M.M. in the Eastern District of Virginia, in which KIM and M.M. discussed defendant KOLON hiring a current DuPont employee as a “consultant.” In the telephone call, KIM indicated to M.M. that KOLON “need[s] trade secret and proprietary information from you and other people.”

99. On or about July 22, 2008, M.M. emailed defendant KIM the resume of a cooperating witness (“C.W.”) who was a current DuPont employee.

100. On or about July 23, 2008, defendant KIM forwarded the email from M.M. and the attached resume for C.W. to defendants HAN, RHO, SEO, and another KOLON employee with the following request:

We received the attached resume[] of staff members currently working for Company D from [M.M.], our agent in the U.S. . . . It is worth noting that he is currently working for the competitor. It seems that [a] cautious approach is needed.

101. On or about July 23, 2008, a KOLON employee replied by email as follows to defendants HAN, RHO, SEO, and KIM regarding C.W.'s resume:

Personal information of the best possible for consultation. We must have him [C.W.] without question. But it is advisable for Business Team to consult with the legal experts in headquarters and review it (how to meet and if the consultation can be traced) to avoid legal problems such as with Taijin last time.

102. On or about August 26, 2008, as part of an undercover operation conducted with law enforcement, defendants KIM, RHO, and SEO met with M.M. and C.W. at a hotel in Richmond, Virginia, and C.W. told defendants KIM, RHO, and SEO the following:

This is very proprietary information that you're talking about . . . This is not available in patents or anything else . . . I need to be compensated for this information . . . We're talking about DuPont trade secrets . . . [and] I know DuPont does not want to give this information up.

103. After hearing C.W.'s representations about his willingness to sell DuPont trade secrets, defendants KIM, RHO, and SEO and C.W. discussed how the "consultation" with C.W. could be conducted without creating evidence. During that conversation, SEO told C.W. the following:

What I'm – what I'm thinking about that – this kind of conversation must be confidential. Okay? We don't want to – we don't want to leave out some kind of evidence, for example. If we

sent some kind of letter to you, then I would be troubled about some problems, yes? . . . And also for you and for my company.

**E. KOLON's Heracron Factory Contained Equipment Identical to DuPont's Equipment**

104. By in or about April and May 2010, defendant KOLON possessed and used at least the following pieces of equipment with components identical in design and dimensions to DuPont's equipment for making Kevlar:

- a. Quench (including insert and tray diameters, quench platform edges, and alignment of quenches);
- b. Wash cabinets (including cabinet dimensions, and roll diameter, length, and spacing); and
- c. Drier rolls (including roll diameter and length).

105. The design and dimensions of the DuPont equipment referenced in paragraph 104 were confidential and were not publicly known.

(In violation of Title 18, United States Code, Section 1832(a)(5).)



**COUNT 2**  
**(Theft of Trade Secrets – Spruance Denier Economics –**  
**Defendant KOLON INDUSTRIES, INC.)**

THE GRAND JURY FURTHER CHARGES THAT:

106. Paragraphs 72 through 76 of Count One are hereby realleged and incorporated as though set forth fully herein.

107. The “Sruance Denier Economics.xls” document obtained by defendant KOLON had independent economic value because it revealed key parameters of the Kevlar business, including DuPont’s costs, profit margins, and resource allocation related to particular Kevlar products.

108. DuPont used a number of reasonable measures to keep the “Sruance Denier Economics.xls” document from public disclosure, including treating it as confidential, distributing it to employees on a limited, need-to-know basis, and prohibiting current and former employees from disclosing confidential information without prior written permission from DuPont.

109. From on or about March 14, 2007 through on or about March 20, 2007, defendant

**KOLON INDUSTRIES, INC.**

acting through its employees, invited and arranged for M.M. to travel from his home in Chesterfield, Virginia, within the Eastern District of Virginia, to South Korea, with the intent to convert DuPont trade secrets possessed by M.M., that are related to and included in a product that is produced for and placed in interstate and foreign commerce, to the economic benefit of anyone other than the owner of the trade secret, and intending and knowing that the offense will, injure any owner of that trade secret, and upon M.M.’s arrival in South Korea copied and

duplicate without authorization a document titled "Spruance Denier Economics" that contained DuPont trade secrets.

(In violation of Title 18, United States Code, Sections 1832(a)(2) and 2.)

**COUNT 3**  
**(Theft of Trade Secrets – Kevlar Customer Information –**  
**Defendant KOLON INDUSTRIES, INC.)**

THE GRAND JURY FURTHER CHARGES THAT:

110. Paragraphs 72 through 75, and 77, of Count One are hereby realleged and incorporated as though set forth fully herein.

111. The compilation of Kevlar customer documents obtained by defendant KOLON had independent economic value because it revealed key parameters of the Kevlar business, including the identity of DuPont's customers, the confidential sales prices that DuPont extended to each of those customers, and the quantities of Kevlar products bought by those customers.

112. DuPont used a number of reasonable measures to keep Kevlar customer information from public disclosure, including treating such information as confidential, distributing it to employees on a limited, need-to-know basis, and prohibiting current and former employees from disclosing confidential information without prior written permission from DuPont.

113. From on or about March 14, 2007 through on or about March 20, 2007, defendant

**KOLON INDUSTRIES, INC.**

acting through its employees, invited and arranged for M.M. to travel from his home in Chesterfield, Virginia, within the Eastern District of Virginia, to South Korea, with the intent to convert DuPont trade secrets possessed by M.M., that are related to and included in a product that is produced for and placed in interstate and foreign commerce, to the economic benefit of anyone other than the owner of the trade secret, and intending and knowing that the offense will, injure any owner of that trade secret, and upon M.M.'s arrival in South Korea copied and

duplicated without authorization a document that identified Kevlar customers and contained  
 DuPont trade secrets.

(In violation of Title 18, United States Code, Sections 1832(a)(2) and 2.)

**COUNT 4**  
**(Theft of Trade Secrets – North American MRG BUSINESS PLAN –**  
**Defendant KOLON INDUSTRIES, INC.)**

THE GRAND JURY FURTHER CHARGES THAT:

114. Paragraphs 72 through 75, and 78, of Count One are hereby realleged and incorporated as though set forth fully herein.

115. The “North American MRG BUSINESS PLAN” obtained by defendant KOLON had independent economic value because it revealed DuPont’s strategic plan for its mechanical rubber goods market, including an evaluation of specific Kevlar business segments and DuPont’s business strategy for each of those segments.

116. DuPont used a number of reasonable measures to keep the “North American MRG BUSINESS PLAN” from public disclosure, including treating it as confidential, distributing it to employees on a limited, need-to-know basis, and prohibiting current and former employees from disclosing confidential information without prior written permission from DuPont.

117. From on or about March 14, 2007 through on or about March 20, 2007, defendant

**KOLON INDUSTRIES, INC.**

acting through its employees, invited and arranged for M.M. to travel from his home in Chesterfield, Virginia, within the Eastern District of Virginia, to South Korea, with the intent to convert DuPont trade secrets possessed by M.M., that are related to and included in a product that is produced for and placed in interstate and foreign commerce, to the economic benefit of anyone other than the owner of the trade secret, and intending and knowing that the offense will, injure any owner of that trade secret, and upon M.M.’s arrival in South Korea copied and

· duplicated without authorization a document titled “North American MRG BUSINESS PLAN”  
that contained DuPont trade secrets.

(In violation of Title 18, United States Code, Sections 1832(a)(2) and 2.)

**COUNT 5**  
**(Theft of Trade Secrets – M.M. Email of September 5, 2007 –**  
**Defendant KOLON INDUSTRIES, INC.)**

THE GRAND JURY FURTHER CHARGES THAT:

118. Paragraphs 88 and 89 of Count One are hereby realleged and incorporated as though set forth fully herein.

119. The information obtained by defendant KOLON from M.M.'s email dated September 5, 2007, had independent economic value because it revealed key parameters of the Kevlar business, including design and capacity information for each of the Kevlar commercial production lines, as well as DuPont's costs, profit margins, and resource allocation related to particular Kevlar products.

120. DuPont used a number of reasonable measures to keep the information referenced in paragraph 119 from public disclosure, including treating it as confidential, distributing it to employees on a limited, need-to-know basis, and prohibiting current and former employees from disclosing confidential information without prior written permission from DuPont.

121. On or about September 5, 2007, defendant

**KOLON INDUSTRIES, INC.**

acting through its employees, with the intent to convert trade secrets possessed by M.M., that are related to and included in a product that is produced for and placed in interstate and foreign commerce, to the economic benefit of anyone other than the owner of the trade secret, and intending and knowing that the offense will, injure any owner of that trade secret, caused M.M. to transmit from the Eastern District of Virginia without authorization a portion of a Denier Economics spreadsheet that contained DuPont trade secrets.

(In violation of Title 18, United States Code, Sections 1832(a)(2) and 2.)



**COUNT 6**  
**(Obstruction of Justice – All Defendants)**

THE GRAND JURY FURTHER CHARGES THAT:

122. In or about February 2009, after learning that DuPont had filed a civil suit against defendant KOLON in United States District Court for the Eastern District of Virginia, defendant SEO convened a meeting of KOLON employees and instructed them to search for documents and other materials related to the “consultants” and to mark them for deletion.

123. Shortly after the meeting convened by defendant SEO, two KOLON employees who had attended the meeting marked numerous electronic files with instructions such as “Delete,” “Need to delete,” and “Get rid of.”

124. In or about February 2009, after learning of DuPont’s civil suit, defendant CHOI deleted numerous files and email items related to the “consultants” from his work computer and his work email account.

125. In or about February 2009, after learning of DuPont’s civil suit, defendant HAN deleted numerous files and email items related to the “consultants” from his work computer and his work email account.

126. In or about February 2009, after learning of DuPont’s civil suit, defendant KIM deleted numerous files and email items related to the “consultants” from his work computer and his work email account.

127. In or about February 2009, after learning of DuPont’s civil suit, defendant RHO deleted numerous files and email items related to the “consultants” from his work computer and his work email account.

128. Thereby, defendants

**KOLON INDUSTRIES, INC.,  
JONG-HYUN CHOI,  
IN-SIK HAN,  
JU-WAN KIM,  
KYEONG-HWAN RHO, and  
YOUNG-SOO SEO**

corruptly destroyed, attempted to destroy, and counseled others to destroy documents with the intent to impair the availability of those documents for use in an official proceeding in the Eastern District of Virginia.

(In violation of Title 18, United States Code, Sections 1512(c)(1) and 2.)

FORFEITURE NOTICE

Pursuant to Rule 32.2(a), Federal Rules of Criminal Procedure, defendants are notified that upon conviction of one or more of the offenses alleged in Counts One through Five of this Indictment, defendants

**KOLON INDUSTRIES, INC.,  
JONG-HYUN CHOI,  
IN-SIK HAN,  
JU-WAN KIM,  
KYEONG-HWAN RHO, and  
YOUNG-SOO SEO**

shall forfeit to the United States, 1) any property constituting or derived from any proceeds obtained directly or indirectly as a result of the commission of the offenses charged in Counts One through Five of this Indictment, and 2) any property used, or intended to be used, in any manner or part to commit or facilitate the commission of any offense charged in Counts One through Five of this Indictment.

Property subject to forfeiture includes the following:

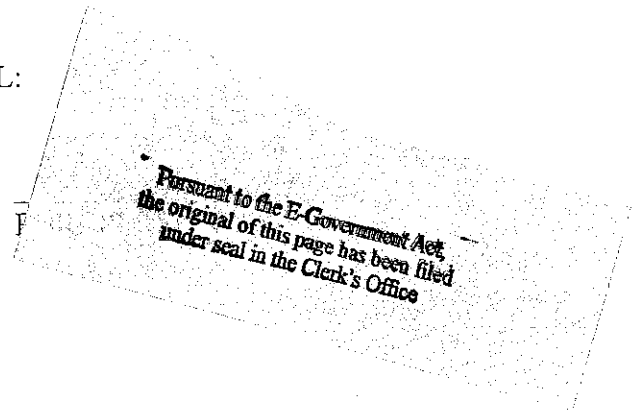
The sum of at least \$225,823,000 representing the gross proceeds of the sale of the para-aramid fiber product known as Heracron, by defendant Kolon Industries, Inc. and any of its subsidiary companies from January 2006 through June 2012.

Payments made by or on behalf of defendant Kolon Industries, Inc. to former Dupont employees in exchange for trade secret information pertaining to para-aramid fiber production and marketing. Payments include the following:

\$143,000 paid to A.S.  
\$80,000 paid to E.S.  
\$128,000 paid to M.M.

(In accordance with 18 U.S.C. §§ 1834 and 2323 and 21 U.S.C. § 853.)

A TRUE BILL:

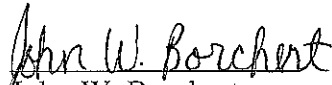


Neil H. MacBride  
United States Attorney

  
Timothy D. Belevetz

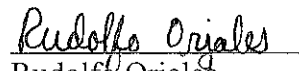
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